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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,420	12/03/2003	Steven D. Potter	FM-241J	5823

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EXAMINER

MOHANDESI, IRAJ A

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/726,420	Applicant(s) POTTER, STEVEN D.	
	Examiner Iraj A. Mohandesi	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 74 is/are allowed.
- 6) ☐ Claim(s) 1-16, 18-23, 25, 26, 28-34, 36-42, 44, 48, 50, 59, 60, 62, 63, 66 and 68-73 is/are rejected.
- 7) ☐ Claim(s) 17, 24, 27, 35, 43, 45-47, 49, 53, 55-58, 61, 64, 65 and 67 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/22/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, with respect to restriction requirement have been fully considered and are persuasive. The claims 69 and 70 have been rejoined to the remaining claims 1-68 and 71-74. see attached interview.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 11/22/2044. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-16,18-23,25,26,28-34,36-42,44,48,50-52,54,59,60,62,63,66,68-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldie US patent 5,495,131.

Goldie'131 discloses a parallel air gap serial flux electrical machine having an actuation axis (C, see Fig.7) comprising: a stator (132,134, column 8,line 56 Fig. 8) including a set of spaced blades (see Fig. 7) each extending in the direction of

Art Unit: 2834

the actuation axis (C), each blade including a plurality of alternating low permeability and high permeability teeth (180 and 184, column 9, line 14); a shuttle (124, column 8, line 51 and 128, Fig. 8) also including a set of spaced blades each extending in the direction of the actuation axis interleaved with the blades of the stator (see Fig. 8), each blade of the shuttle also including a plurality of alternating low permeability and high permeability teeth (Fig. 8), and an active component associated with either the stator, the shuttle, or both (122 and 124) the active component divided into at least N phases (see Fig. 7 and 8), each phase including a set of blades (Fig. 8), a flux return portion (152, column 8, line 63), and a coil (142, column 8, line 58) wound to produce flux through the sets of interleaved blades in a direction substantially transverse to the actuation axis (Fig. 7 and 8).

Goldie'131 teaches a linear motor (column 5, line 50) having three phases (Fig. 8), stator defines a housing to receive the shuttle (Fig. 8), a telescopic motion (Fig. 7), inherently large and small gap (Fig. 8).

Allowable Subject Matter

5. Claims 17, 24, 27, 35, 43, 45-47, 49, 53, 55-58, 61, 64, 65, 67, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claim 74 is allowed.
7. The following is an examiner's statement of reasons for allowance:

Art Unit: 2834

The prior art of the record in particular Goldie'131 does not teach or suggest a supporting structure for a linear reluctance motor having an actuation axis, the linear reluctance motor comprising: a stator including a set of spaced blades each extending in the direction of the actuation axis, each blade including a plurality of alternating low permeability and high permeability teeth a shuttle also including a set of spaced blades each extending in the direction of the actuation axis interleaved with the blades of the stator including inter alias , a shuttle including at least a first pair of adjacent blade sets opposing a second pair of adjacent blade sets defining two phases and a third pair of adjacent blade sets opposing a fourth pair of adjacent blade sets defining two additional phases.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

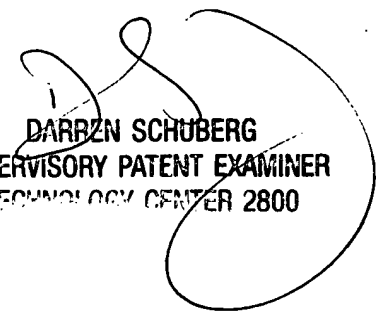
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A. Mohandesi whose telephone number is 571-272-2028. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

I Mohandesi May 8, 2006



DARZEN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800